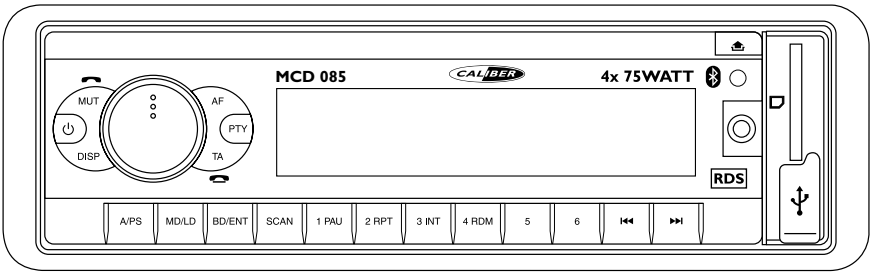
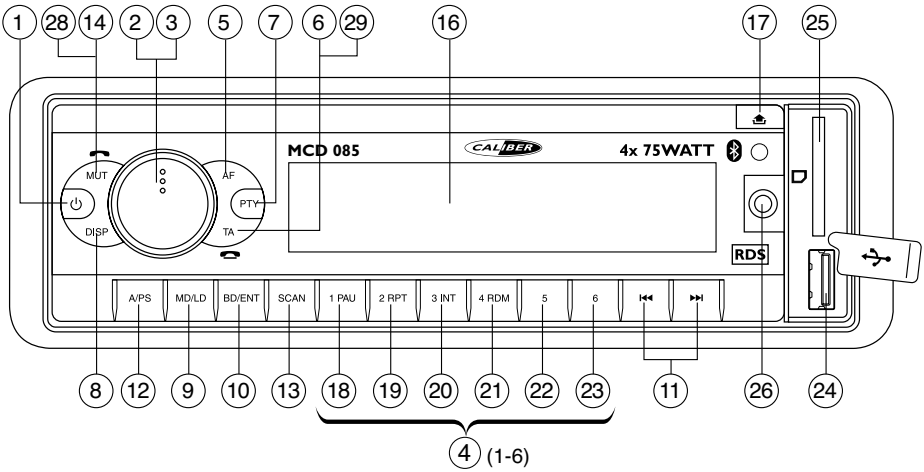
MCD 085

INSTRUCTION MANUAL

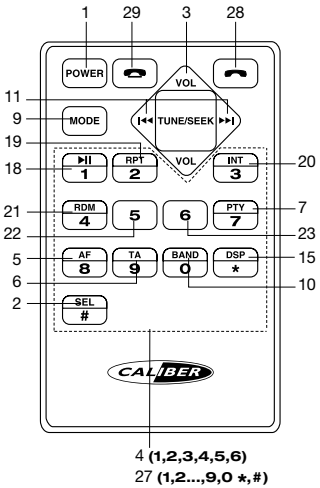


Car Stereo MP3/WMA Player
with PLL FM Stereo Radio
Radio Data System with PTY
AUX IN / USB / MMC / SD Card Input
Bluetooth Function in Mobile Phone
Flip Down and Detachable Front Panel System

LOCATIONS OF CONTROLS



1. POWER ON/OFF (⏻)
2. FUNCTION SELECT BUTTON: CONTROLS FOR BASS/TREBLE/ BALANCE/FADER / INITIAL VOLUME / CT / TA VOL / EON / DSP
3. VOL UP/VOL DOWN BUTTON: CONTROLS FOR BASS/TREBLE/ BALANCE/FADER / INITIAL VOLUME / CT / TA VOL / EON / DSP
4. PRESET STATIONS (1,2,3,4,5,6)
5. 'AF' function (ALTERNATIVE FREQUENCIES)
6. 'TA' function (TRAFFIC ANNOUNCEMENT)
7. 'PTY' function (PROGRAM TYPE)
8. DISPLAY BUTTON (DISP)
9. MODE/LOUDNESS BUTTON (MD/LD)
10. BAND/ENTER BUTTON (BD/ENT)
11. AUTOMATIC OR MANUAL TUNING (FREQ UP ⏭ OR FREQ DOWN ⏮) TRACK/SEARCH BUTTON
12. AUTO SEEK SEARCH TUNING (A/PS)
13. 'SCAN' AUTOMATIC TUNING CONTROL (SCAN)
14. MUTE BUTTON (MUT)
15. EQUALIZER (DSP)
16. LCD DISPLAY
17. OPEN PANEL BUTTON (⏏)
18. PAUSE BUTTON
19. REPEAT BUTTON
20. INTRO BUTTON (Preview all Tracks)
21. RANDOM BUTTON
22, 23. FOLDER DOWN/UP (MP3/WMA Files only)
24. USB PORT
25. MULTI-MEDIA CARD (MMC) / SD CARD SLOT
26. AUX IN
27. PHONE NUMBER
28. ANSWER A CALL (📞)
29. END A CALL (📵)



INSTALLATION

PRECAUTIONS

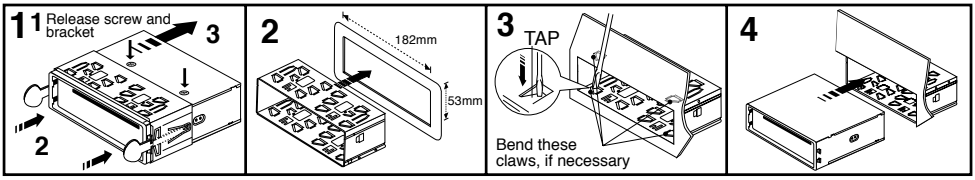
- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.
- Be sure to remove the front panel before installing the unit.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

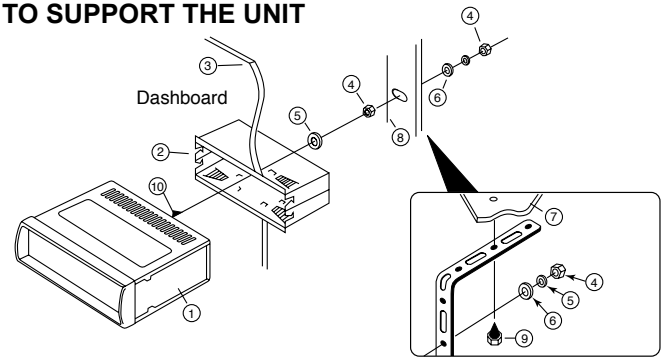
MOUNTING EXAMPLE

Installation in the dashboard



Note: Keep the release key in a safe place as you may need it in the future to remove the unit from the car.

TO SUPPORT THE UNIT



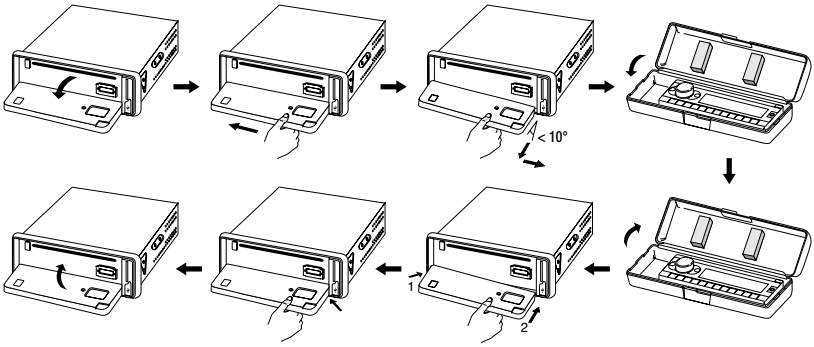
1. UNIT
2. RELEASE CASE
3. DASH BOARD
4. HEX NUT
5. LOCK WASHER
6. PLAIN WASHER
7. CAR BODY
8. REAR SUPPORT STRAP
9. TAPPING SCREW
10. M5 X 15 HEX BOLT

Detaching and attaching the front panel

The front panel of this unit can be detached in order to prevent the unit from being stolen.

FOLDING DOWN AND DETACHING/ATTACHING THE FRONT PANEL

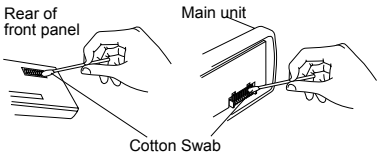
Before detaching the front panel, be sure to press the ⏻ button (1) to OFF first.
Then press the ⏏ button, let the Front Panel arrive in horizontal position and detach the panel by pulling it towards you as illustrated.



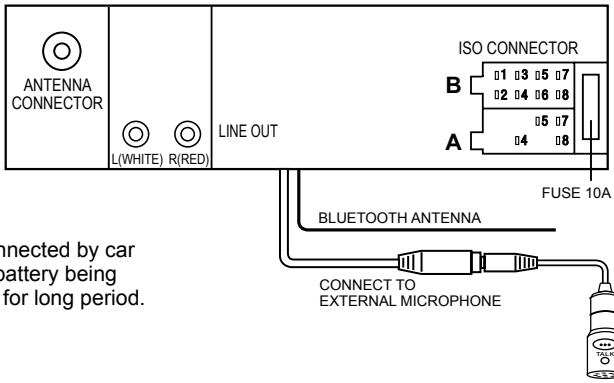
Notes:
- Do not press the front panel hard against the unit when attaching it. It can be easily attached by pressing it lightly against the unit.
- When you carry the front panel with you, put it in the supplied front panel case.
- Do not press hard or give excessive pressure to the display window of the front panel when attaching it to the unit.

CLEANING THE CONNECTOR

The unit may not function properly if the connectors between the unit and the front panel are contaminated with dirt. In order to prevent this from happening, detach the front panel by pressing the ⏏ button and clean the connector from time to time.
Clean the connector with a cotton swab together with contact cleaner as illustrated. Be sure to clean them carefully pin by pin and make sure not to damage the connecting points.



ISO CONNECTOR



RCA Jack Line Out:
Red (right) White (left)

CONNECTOR A
4. MEMORY +12V
5. AUTO ANTENNA OUTPUT
7. +12V (TO IGNITION KEY)
8. GROUND

Note: (connector A no. 7) must be connected by car ignition key in order to avoid that car battery being drained when the car will be not used for long period.

CONNECTOR B
1. REAR RIGHT SPEAKER (+)
2. REAR RIGHT SPEAKER (-)
3. FRONT RIGHT SPEAKER (+)
4. FRONT RIGHT SPEAKER (-)
5. FRONT LEFT SPEAKER (+)
6. FRONT LEFT SPEAKER (-)
7. REAR LEFT SPEAKER (+)
8. REAR LEFT SPEAKER (-)

Maintenance
FUSE REPLACEMENT

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after the replacement, there may be an internal malfunction. In this case, consult your nearest repair center.

Warning

Use the specified amperage fuse for each lead. Use of a higher amperage fuse may cause serious damage.

OPERATING INSTRUCTIONS

1. POWER ON/OFF (⏻)
By pressing this key, the unit is on or off.
This unit is turned on by pressing any key.

2. FUNCTION SELECT BUTTON: BASS/TREBLE/BALANCE/FADER / INITIAL VOLUME / CT / TA VOL / EON / DSP

3. VOLUME UP/DOWN
Turning **VOL** knob (right/left) to adjust VOL/BAS/TRE/BAL/FAD. To select other functions, press the **VOL** knob shortly until the desired functions are shown on the display. Figure 1 shows how to control functions that are selected using the **VOL** knob.

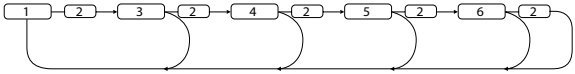
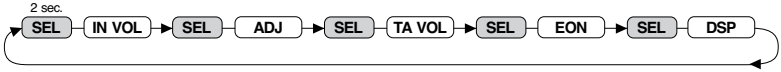


Fig. 1 Selection of sound control functions

1. VOL 2. SEL 3. BASS 4. TRE 5. BAL 6. FAD

Increase or decrease the volume by turning VOL knob (right/left). These buttons can be used to adjust the BASS, TREBLE, BALANCE and FADER.



Press and hold **VOL** knob to adjust INIT VOL /CT/TA VOL/EON ON/DSP
IN VOL: Can adjust Initial Volume level using this mode.
ADJ: Can adjust clock time. Turn **VOL** knob clockwise to set hours and counter clockwise to set minutes.
TA VOL: Can adjust TA Volume (The volume level when Traffic announcement is transmitted).
EON: Can selected EON condition, ON or OFF.
DSP: Can select DSP mode (Classic, Rock, POP, Flat)

4. PRESET STATIONS (1,2,3,4,5,6)
When pressed momentarily, these keys select a preset station directly. When pressed longer than 1 sec., current station is stored in preset memory bank.

USING THE RDS FUNCTION
What is RDS?
The RDS (Radio Data System) is a digital information system developed by the EBU (European Broadcast Union). Piggy-backed on normal FM broadcasts, RDS offers a variety of information services and automatic retuning functions for RDS-compatible car stereos.
In 1988, RDS became available in the United Kingdom, France, West Germany, Ireland and Sweden. Test transmissions are being conducted in many other European countries. It is expected that RDS will be available in most western European countries in the near future.

5. 'AF/REG' function (ALTERNATIVE FREQUENCIES)
When pressed momentarily, AF/REG switching mode is selected.
When AF/REG switching mode is selected, the radio checks the signal strength of the AF all the time. When pressed long, it is activated as regional mode ON/OFF.
– Regional mode ON:
AF switching or PI SEEK is implemented to the station which have all PI codes same as current station. REG segment is turned on, in LCD display.
– Regional mode OFF
The regional code in the format of PI code is ignored when AF switching or PI SEEK is implemented.

6. 'TA' function (TRAFFIC ANNOUNCEMENT)
When pressed momentarily, it is activated as TA mode on or off
When TA mode is on and traffic announcement is transmitted
– If the volume level was under the threshold point, it will be raised to the threshold point.
– When TP station is received, TP segment is turned on in LCD display.

7. 'PTY' function (PROGRAM TYPE)
When pressed momentarily, it is activated as TPY ON/OFF function and start to search corresponding PTY information then stops if the corresponding PTY information is detected.
By pressing this key longer than 2 sec., you can select PTY mode by turning Volume knob as below.
NEWS--AFFAIRS--INFO--SPORT--EDUCATE--DRAMA--CULTURE--SCIENCE--VARIED--POP--ROCK--EASY M--LIGHT M--CLASSIC--OTHER M--WEATHER--FINANCE--CHILDREN--SOCIAL--RELIGION--PHONE IN--TRAVEL--LEISURE--JAZZ--COUNTRY--NATION. M--OLDIES--FOLK M--DOCUMENT--TEST--ALARM.

8. DISPLAY (DISP)
Press **DISP** button to switch between display informations such as radio frequencies, clock, track and other informations depending on the playing MODE.

9. MODE/LOUDNESS BUTTON (MD/LD)
By pressing this key, user can select. AUX/TUNER/USB/SD/MMC/AD2P mode.
LOUDNESS: By pressing this key longer than 2 sec., you can select LOUDNESS mode.

10. BAND BUTTON (BD)
Each band is toggled cyclically by pressing this key FM1---FM2---FM3.

11. AUTOMATIC OR MANUAL TUNING (FREQ UP ⏭ OR FREQ DOWN ⏮)
(A) RADIO MODE
When pressed momentarily, these keys are operated as SEEK tuning mode.
When pressed longer than 1 sec., they are operated as MANUAL tuning mode.
(B) MP3/WMA PLAYER MODE
When pressed momentarily, they are operated as TRACK UP or TRACK DOWN mode.
When pressed longer than 1 sec., they are operated as CUE or REVIEW mode.

12. AUTO SEEK SEARCH TUNING (A/PS)
PS - By pressing shortly, the radio searches for each preset station. Each preset station will be played for 5 sec.
AS - By pressing longer than 1 sec, the 6 strongest stations are stored in the corresponding preset memory number. When Automatic Scan operation is finish, the radio executes the preset scan.

13. 'SCAN' AUTOMATIC TUNING CONTROL (SCAN)
Press **SCAN** button to activate radio scan. The unit will search for every station and will play 5 seconds of each station found. To cancel SCAN, press the button once more.

14. MUTE BUTTON (MUT)
Press this button to turn off the sound. Press it again to return to the previous volume level.

15. EQUALIZER (DSP)
Press **DSP** to select between (Classic, Rock, POP, Flat) equalizer modes.

16. LCD DISPLAY
The Liquid Crystal Display will display the current state of the unit.

17. OPEN THE FRONT PANEL
Press ⏏ button and the front panel will open.

MP3/WMA CONTROL LOCATION OF PARTS

TRACK/SEARCH BUTTON (11)
FORWARD AND REVERSE TRACK SEARCH (or changing songs)
Press the SKIP button (⏮ or ⏭) during play to go to the desired track(song).
⏮ ....REVERSE ⏭ ....FORWARD
Press and hold the SKIP button (⏮ or ⏭) during play to scan at high speed. When the desired music section is found, release the button. Normal play will resume.

18. PAUSE BUTTON
During "PLAY", press (18) 'PAU' button to "PAUSE". Press it again to resume play.

19. REPEAT BUTTON
When this button is pressed, "RPT" indication is displayed and play of the selected track will be continually repeated until the Track repeat mode is cancelled by pressing 'RPT' button again.

20. INTRO BUTTON (Preview all Tracks)
When this button is pressed, "INT" indication is displayed and the first several seconds of each track is played. Press again to stop intro and listen to track.

21. RANDOM BUTTON
When this button is pressed, "RDM" indication is displayed and each track is played in random instead of normal progression. To cancel RANDOM mode, press 'RDM' button again.

22, 23. FOLDER DOWN/UP (In case of MP3/WMA files)
M5: Folder down / M6: Folder up

HOW TO SELECT MP3/WMA FILES

1. **Searching by Track:**
   - Press “A/PS”, then search track is activated.
   - Turn “VOL” knob to left or right, select first digit desired.
   - Press “VOL” knob, then the first digit is fixed and second digit will flash.
   - Turn “VOL” knob to left or right, select 2’nd 3’rd respectively.
   - Press “BD/ENT”, the song selected will start.
2. **Searching by Character:**
   - Press “A/PS” twice, then character search mode is activated.
   - Turn “VOL” knob to left or right, you can select the desired letter.
   - Press “VOL” knob, repeat steps above for 2’nd 3’rd character.
   - The songs with the same character that you selected is displayed.
   - Turn “VOL” knob to left or right, you can select the desired song.
   - Press “BD/ENT”, then the song selected will start.
3. **Searching by File Name:**
   - Press “A/PS” 3 times, then folder search is activated.
   - Turn “VOL” knob to left or right, you can select the desired folder.
   - Press “BD/ENT”, then the folder is fixed and the first file will be played.

24, 25. USB/SD/MMC Memory Card

The device is equipped with a USB interface and a memory card reader for SD/MMC cards.
MP3 or WMA files stored on these media can be played.

1. Plug your USB storage medium into the USB port.
2. If you use a memory card, insert it into the memory card reader.
3. The player automatically switches to the input used and starts playback.
4. See the section on operations common for audio files on how to control USB or memory card playback.

Note:

- *Due to the great variety of devices with USB and SD/MMC card interfaces that sometimes have manufacturer-specific functions, we cannot guarantee that all media will be recognized and that all operational functions will be available with this device.*
- *You cannot operate USB hard drives on the device.*

26. Connecting AUX IN

An external audio source (e.g. portable MP3 player) can be connected to the AUX IN socket to be played back by the vehicle loudspeakers.

- Connect the AUX IN socket with the audio output of the external device.

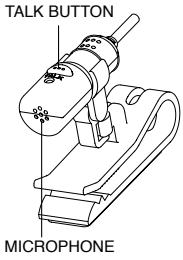
HOW TO USE BLUETOOTH IN YOUR CAR AUDIO

How to Perform Pairing

Before you can dial out from the car stereo, you must first perform PAIRING. Pairing is a procedure used to connect 2 Bluetooth devices together.

1. This unit’s Bluetooth function is always on, perform the pairing starting from your cellular phone. Refer to your cellular manual on proper pairing.
2. Perform the search for available Bluetooth devices, **“CAR--BT ”** will show. Enter **‘0000’** when asking for code.
3. After successful pairing, connect to the head unit if it is not automatically connected.

How to call / receive calls using wired remote controller



- When there is incoming call, press **TALK** button once to answer.
- During conversation, press **TALK** button once to end call.
- To make calls using call history
  1. Press and hold **TALK** button to display “REDIAL” history.
  2. Using VOL knob on main unit, turn repeatedly to select the phone number you want to make call to and press “ ” to dial out.

Note: *Up to 20 phone numbers will be displayed including previous outgoing and incoming calls.*

How to call / receive calls using wireless remote controller

- To make calls, press “ ” button on the remote controller followed by pressing TEL NO using number keys.
- After entering TEL NO, press “ ” again to dial out.
- During conversation, press “ ” button to end call.
- When there is incoming call, press “ ” button to receive call.
- Press “ ” button to reject incoming calls.

How to make / receive calls using front panel

- To make calls using call history
  1. Press and hold “ ” to display “REDIAL” history.
  2. Using VOL knob on main unit, turn repeatedly to select the phone number you want to make call to and press “ ” to dial out.

- During conversation, press " " button to end call.
- When there is incoming call, press " " button to receive call.
- Press " " button to reject incoming call.

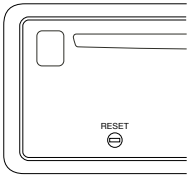
Audio Streaming

1. If your phone is "A2DP" format is compatible, you can play music in your mobile and the music will be transferred to car audio unit.
2. Make sure your mobile and the car radio unit is paired and connected.
3. Play the music in your mobile according to your mobile operating method.
4. Unit will display "A2DP" when receiving A2DP music automatically, but for some mobile your have to press **LD/MOD** button to change A2DP mode.
5. You can press ⏮ or ⏭ on head unit for previous or next tracks.

RESET

Reset button is placed on the housing.
The reset button is to be activated for the following reason:

- Initial installation of the unit when all wiring is completed.
- All the function button do not operate.
- Error symbol on the display.



TECHNICAL SPECIFICATIONS

MP3/WMA PLAYER SECTION

Signal to Noise Ratio	> 60 dB
Channel Separation	> 50 dB (1kHz)
Frequency Response	20Hz - 20 kHz

TUNER (FM)

Frequency Range	87.5-108 MHz
Channel Step	50 kHz
Intermediate Frequency	10.7 MHz
Sensitivity	2.8 µV
Stereo Separation	30 dB
Signal to Noise Ratio	> 50 dB

LINE-OUT

Output	1.5V (max.)
Impedance	10k Ohm

GENERAL

Power Supply	12V DC (10.8-15.6V allowable)
Speaker Impedance	4 or 8 ohm
Output Power	75W x 4CH
Fuse	10A

Note: Specifications and the design are subject to possible modification without notice due to improvement.